© 2004 Cannon Design All rights reserved. No part of this document may be reproduced or utilized in any form, without prior written authorization by The Cannon Corporation. eanders 8/17/2004 3:12:08 PM p:\02414.01\cooling tower\elec\ctr-e101.dwg ..\base\ctr-tblk.dwg;..\elec\ctref00g.dwg;..\base\ctrbbase.dwg TANA CANANA TO COL EXISTING 124TO VOLT SWITCHGEAR UNIT-B TO REMAIN (LOCATED IN ELECTRICAL ROOM "SBI" AT SECOND BASENENT LEVEL IN THE BUILDING). SEE NOTE #17 ON DRAWING E102.

EXISTING 15 KV SWITCH UNIT TO REMAIN. SEE NOTE #18 ON DRAWING E102.

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IS KV PRIMARY UNDERGROUND FEEDER CABLE. 3-1/C, #2 AWG EPR, COPPER, 133% INSULATION AND #2 AWG BARE STRANDED, TINNED COPPER GROUNDING CONDUCTOR.

JUNCTION BOX FOR 208V-1 PHASE POWER CONNECTION TO HEAT TRACE. COORDINATE EXACT LOCATION WITH HECHANICAL CONTRACTOR. PROVIDE FINAL ELECTRICAL CONNECTION TO HEAT TRACE.

EXISTING 15 KV PRIMARY SWITCH TO REMAIN.

EXISTING 480 VOLT MAIN CIRCUIT BREAKER TO REMAIN.

EXISTING 480 VOLT MAIN CIRCUIT BREAKER TO REMAIN.

EXISTING 19 ALL T PROTECTION IN PANEL "PP-CT" AND CONNECT. REMOVE SPARE CIRCUIT BREAKER. COORDINATE WITH EPA BUILDING ENGINER.

BASIN HEATER. FOR EXACT LOCATION REFER TO MECHANICAL DRAWINGS.

EXISTING 400A AUTOMATIC TRANSFER SWITCH TO REMAIN.

EXISTING 400A AUTOMATIC TRANSFER SWITCH TO REMAIN.

EXISTING 50KVA, 480V-120/208V TRANSFORMER TO REMAIN.

EXISTING 60KARE NOTE SEENER SWITCHBOARD TO REMAIN.

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EXISTING 60KARE TYPE AND AIC RATING SHALL MATCH EXISTING 60KALL FATER AND AIC RATING SHALL MATCH EXISTING 60KALL FA ALL EXPOSED CONDUIT RUNS IN THE COMMONWALKWAY AREAS SHALL BE ALONG THE WALLS AND OVERHEAD, PROPERLY SUPPORTED.

4. ALL POWER DISCONNECT SWITCHES SHALL BE CAPABLE OF LOCKING IN THE "OFF" POSITION.

5. FOR EXACT LOCATION OF VFD'S, REFER TO MECHANICAL DRAWINGS. CONTRACTOR SHALL WIRE ALL MISCELLANEOUS 120/271 VOLT POWER REQUIREMENTS ASSOCIATED WITH MOTORS, VFD'S AND CONTROLS. COORDINATE WITH MECHANICAL CONTRACTOR.

5. VFD'S ARE FURNISHED BY DIVISION IS WITH BYPASS SWITCH MOTOR PER N.E.C. REQUIREMENTS. PROVIDE MINIMUM OF 42" WORK CLEARANCE IN FRONT OF DISCONNECT SWITCH.

5. COORDINATE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT IN FIELD WITH MECHANICAL EQUIPMENT, BUILDING STRUCTURES, LOUVERS, PIPING, ETC., PRIOR TO ROUGH-IN. JINCTION BOX FOR 120V-I PHASE POWER CONNECTION TO HEAT TRACE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. PROVIDE FINAL ELECTRICAL CONNECTION TO HEAT TRACE.

2 #10 + I #106 IN 3/4"C. PROVIDE IP-20A CIRCUIT BREAKER WITH GROUND FAULT PROTECTION IN PANEL "PP-CT" AND CONNECT.

FREE STANDING IN NEMA-4X ENCLOSURE. PROVIDE ALL NECESSARY SUPPORTING STRUCTURE.

PENDANT MOUNTED INDUSTRIAL FLUORESCENT LIGHT FIXTURE. COORDINATE EXACT LOCATION IN FIELD WITH MECHANICAL EQUIPMENT LAYOUT. LITHONIA # EJ 232T8-120V (-20°F BALLAST) GEB.

CONNECT TO IP-20A CIRCUIT BREAKER IN EXISTING PANEL "PP-CT". CONNECT FOUR RECEPTACLES IN THIS ROOM ON ONE CIRCUIT.

CONNECT TO IP-20A CIRCUIT BREAKER IN EXISTING PANEL "PP-CT". CONNECT SIX LIGHT FIXTURES IN THIS ROOM ON ONE CIRCUIT.

CONTROLLER NEMA SIZE - O.

120 VOLT POWER CONNECTION FOR MECHANICAL CONTROLS. CONTRACTOR.

PROVIDE IN WEATHERPROOF ENCLOSURE.

CONNECT TO IP-20A CIRCUIT BREAKER IN EXISTING PANEL "CONTRACTOR.

PROVIDE IN WEATHERPROOF ENCLOSURE.

CONNECT TO IP-20A CIRCUIT BREAKER IN EXISTING PANEL "PP-CT". CIRCUIT BREAKER TYPE AND AIC RATING SHALL MA EXISTING CIRCUIT BREAKERS TO BE REMOVED.

3#12 + |#126 - 3/4" C.

3#500 KCMIL + |-#26 - 3"C.

3 #1/0 + |-#66 - |-|/2"C.

3 #10 + | #106 - 3/4"C. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS FOR OUTDOOR USE SHALL BE RATED WEATHERPROOF.

ALL EXPOSED CONDUITS AND FITTINGS SHALL BE RIGIT GALVANIZED STEEL (RGS). 20 VOLT POWER CONNECTION FOR MECHANICAL COORDINATE EXACT LOCATION WITH MECHANICA CONTRACTOR. DRAMING NOTES (#): COOLING TOWER EL

E101

COOLING TOWER
ELECTRICAL PLAN AND
ONE-LINE DIAGRAM

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Final Submission August 16, 2004

COOLING TOWER REPLACEMENT



Andrew W.
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